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IS PANTHEISM THE LEGITIMATE OUTCOME OF MODERN SCIENCE?¹

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Pantheism presupposes monism. If God is the All, or if the All is God, the All or God must be homogeneous,—either spirit or matter. The distinction between the two must be nominal, not real. Either matter must be a mode of spirit, or spirit a development of matter.

Pantheism is in itself an ambiguous term. It may denote what might be called hypertheism, or it may be a mere euphemism for a denial of the being of God. It may be consistent and co-existent with sincere devotion and fervent piety, or it may exclude the religious element from thought and feeling. Under the first of these phases of pantheism I might class together, very widely as they differ, Spinoza, Berkeley, and Schleiermacher, who, in their profound and vast conception of the All-wise, Almighty, and Infinite Being, could not imagine existence as detached from him, nay, not even by his own creative fiat. As the atmosphere enfolds the earth in its elastic embrace, pulses in every type of organized being, is insphered in the countless globules on the crest of

¹ Read at the Concord School of Philosophy, July 31, 1885.

the wave, swells the bird-song, is broken into unnumbered diversities of pitch and tone in pipe, flute, and organ, lends and reclaims its constituent elements in the unceasing routine of chemical processes in Nature's laboratory, yet is one and the same atmosphere, entire, continuous, unbroken, undiminished, unincreased,—so does He, who alone is, breathe in all life, assume all forms, appear in all phenomena, constitute all harmony, beauty, and grandeur, and, no less, all that seems fearful, malignant, and evil, which seems so only because we, infinitesimal though integral portions of the supreme whole, have not perception sufficiently keen and penetrating to take in the diapason in which we bear our several parts, and for that very reason can hear little outside of the melody we make. In this system the One Being is self-conscious, freely willing, and morally perfect. As compared with him, we men have such consciousness as might be conceived of as residing in the individual organs and members of the human body, if each were conscious of itself, its place, and its functions, and of nothing more, while the man in his totality comprehended all these individual consciousnesses, with the sole directing and controlling power over the organs and members. On this hypothesis we might conceive, in each individual consciousness, of reverence, trust, and love for that on which all depend for guidance and government. Thus the individual man, though himself a part of God, may cherish sentiments of loyalty and devotion toward the Divine Totality of which he is a part.

Pantheism of this type has its logical issue in the denial of the existence of matter. God must be homogeneous, else not perfect. If nature and man are, in philosophical strictness, "but the varied God," and if He exists independently of material conditions—which is the only definition that we can give of spirit—then what we call matter is but a mode of spirit, having no existence except in the consciousness of God, and in the ideas which his presentific volition offers to those sub-consciousnesses which are parts of his own all-embracing consciousness,

Toward this type of pantheism modern science manifestly does not tend; for on this theory there is neither creation, nor development, nor evolution, but only emanation, contingent solely on the Divine will, in such a way that causation can be no more than an arbitrary and in no wise necessary relation of antecedence and

consequence. This form of pantheism, though philosophically untenable, as I have no doubt you think with me, so far from being anti-religious, is in no degree repugnant to Christianity in its most orthodox type, and in those peculiar features of its history which in this sceptical age of ours lie most open to objection and cavil.

But the pantheism with which modern science is charged with being in alliance is materialistic. The only God that it owns is impersonal Law, pervading the universe, necessitating all beings, events, and phenomena, inevitable and inexorable. This Law exists only in the multiform universe which it produces, sustains, and governs, and with which it is identical in such a sense that God and the Universe, the Whole, *τό πᾶν*, are mutually convertible terms. In the totality there is no self-consciousness. Consequently prayer and communion with God cannot be. The only self-consciousness in the universe is that of individual beings sufficiently developed to possess it. God himself is an agnostic. He knows not himself nor anything else. You and I know just as much of him as we know of the universe.

This form of pantheism, if you will not rather term it atheism, is certainly not inconsistent with such statement as might be made and has been made of the development theory. If matter is uncreated and eternal; if its elementary atoms had during a past eternity, and have now, the intrinsic power of self-organization and self-development, so that one of the nebulae now floating in the far-off heavens, without any will or law save its own autonomy, must of necessity have in the process of ages its flora and fauna, its rational beings, its genius, taste, love, faith, and piety, which will in due time culminate in agnosticism; if the growth of man from a primitive speck of protoplasm is as normal and inevitable as the growth of the oak from the acorn in a congenial soil,—then there is no place for a personal God in our philosophy, and, if we shrink from the profession of blank atheism, the only alternative is to apply the name of God to embodied Law. This was the position occupied by John Stuart Mill during the larger part of his life, though he had receded from it when he wrote the essay on potential theism, published after his death. The avowed agnostics assert that no more than this is cognizable, though they give the more religiously disposed the benefit of a doubt, a possibility.

But let us see how much of this theory rests on substantial grounds. Remember that it is at best a theory, an hypothesis. Whether it will ever be more than this we cannot say. There seem, however, to be insurmountable obstacles in the way of its absolute demonstration, though not in the way of the establishment of the law of evolution on such a basis as to insure for it the general consent of thoughtful and scientific minds. Indeed, it has already reached that stage, except with certain persons who are stubborn literalists in the interpretation of Scripture. It is now generally believed, among those who are entitled to have opinions on such subjects, that the solar system—the same being probably true of other like systems—was originally a conglomeration of incandescent matter, which, in cooling, threw off successive rings that globed themselves into planets; that in this star-mist were the germs of all organic being; that specks of primitive protoplasm became self-multiplying cells; that from these cells were developed the earliest forms of self-transmitting life; that the existing species of plants and animals have been in large part the natural progeny of these earliest forms of life, and the result of originally infinitesimal differences, and accumulated increments of these differences, occasioned by varieties of position and surroundings, and that in the history of the physical universe normal development holds the same place that used to be accorded to specific creation, and may account for almost all things as they have been and are.

There are, however, points as to which a reasonable doubt exists in many minds not unscientific. If matter is eternal, how is it that it has not done more for itself in a past eternity,—that in our world there has been active development within what to the man of science is an historical epoch,—that there is incandescent star-mist still afloat in the heavens? Is it conceivable that the being that is from eternity can be mutable? Can the law of development have sprung up spontaneously? Can that law—uniform and acting upon matter originally homogeneous—account for all forms, diversities, and stages of being? Does it account, if for man, for all that he now is? Does it account for all the facts and phenomena which we call moral and spiritual? These are, all of them, points on which observation and analysis give us no data,—no grounds for reasoning. The law of development, even if estab

lished beyond doubt, does not of necessity cover the whole field. There is not sufficient proof that it comprehends all the working forces which have been or are in the universe. There may be, for aught that the scientist can affirm with certainty to the contrary, other laws, forces, and causes behind it, acting concurrently with it, or supplementing it. This certainly has been the belief of men who have had the highest reputation and authority as evolutionists. Darwin never fails to recognize the Supreme Will and Providence, and with so much of manifest sincerity and devout reverence that it cannot have been with him a mere concession to popular prejudice. Asa Gray, rather Darwin's coadjutor than his follower, and now justly holding the foremost place among evolutionists, is not only a theist, but a believing member of a Christian church of unchallenged orthodoxy. The theory in question does not in any sense or degree militate with theism. The only reason why it has been supposed to be anti-theistic is that very many persons have so identified the origin of the universe with the cosmogony of the Pentateuch, that they can conceive of God as the Creator only in the mode there specified.

Now, I do not believe that cosmogony was within the purpose of the author or compiler of the book of Genesis. His aim was to connect the name and thought of the Supreme Being with the various objects of false worship, as light, the sun, moon, and stars, and divers forms of animal and vegetable life, which had divine honors paid to them by the Egyptians and the Canaanites. With poetic feeling, and probably with a mnemonic purpose, he grouped these objects into a drama of creation in six successive acts, corresponding to the six working days of the week, in the hope, as it seems to me, that his devout readers might take those several days' works as themes for meditation, praise, and thanksgiving on the successive six days of the week, as all together on the seventh.

As a theist I look with special favor on the theory of evolution. The shaping of worlds and their inhabitants by unnumbered express acts of creation from nothing or from brute matter is inconceivable, and seems irrational,—especially so as to the creation of the many groups of species, not very far apart, which now never run into one another, and equally as to annoying and venomous plants, insects, and reptiles, which serve no discernible purpose in the economy of nature. It is difficult to imagine mosquitoes,

rattlesnakes, and skunks, with precisely such endowments as they possess, as specifically created, whether for their own happiness or for their services to other animals; while under the theory of evolution nothing is more probable than that certain conditions might lead to the contingent development, and equally to the ultimate disappearance, of forms of organized being that should sustain other than pleasant and healthful relations to their fellow-beings.

That the evolution theory presents itself to the human mind as pre-eminently rational and natural, that by its simplicity it commends itself to our ready adoption, that it has the advantage of intrinsic probability, so far from excluding a Supreme Creative Power, is precisely what we should expect in case the universe was and is the work of Omnipotent Wisdom. If there is a God, our own intelligence was derived from his, and must of necessity be in many respects in accordance with his. Though immeasurably transcending us in wisdom, he yet must, in portions of his character and administration, be intelligible and appreciable by minds that are what he has made them. The reasonableness of the development theory casts discredit, indeed, on the old idea of specific creation, but not on the belief in a Creator. Omnipotence could of course choose its own cosmogony; but it was antecedently probable that its cosmogony would be such as would be recognized with admiration by the most advanced and deep-seeing minds.

But not only is this theory consistent with theism; it is absurd on any other hypothesis. The pantheism which would claim kindred with the evolution theory wholly ignores conscious intelligence in the development of the universe. Yet eternal matter must have had in its primitive atoms the capacity of becoming all that it has been and is; that is, there must have been in the structure of those atoms that which could not fail of becoming life, muscular power, volition, mind, and soul. Each succeeding development must have had its germ in the preceding; all must have had their germs in the primitive cells; and these cells must have chanced into being by fortuitous combinations of atoms swirling in chaos. Under such conditions, combinations must have taken place; but that they should have been effected with the prophecy of such marvellous and diverse issues, that our own ancestry should

have thus had their birth with the certainty that their posterity would, after some thousands of generations, trace the long pedigree back to the time when "the waters stood above the mountains," and that all this should have taken place by a spontaneous energy in the stuff of which the worlds are made, by law without a law-giver, taxes and exceeds our credulity. On the whole ascending series we have, at each stage, a cause more big with effects, till we reach the primitive cell, or the atoms whose combination formed it, where we have a cause containing a series of effects reaching on through myriads of æons, itself uncaused. I say uncaused; for law is not a cause, but a mode of being or of action. Moreover, man is as far as ever from discerning any efficient material cause. There were several alleged causes, such as gravitation, magnetism, electricity, caloric; but they, even when we believed in their separate existence, were names, not for what we knew, but for what we did not know,—fence-words set up to hide our ignorance. They told us how, not why, things took place. They designated laws, not powers; and now, when they are found to be mutually convertible, and but one under several names, still the force of which they are modes and manifestations is as truly an unknown essence as they were. It shows us how, but does not tell us why, phenomena occur. Force is not creative, but executive. It has laws, but cannot make laws. It is an essential agent in evolution; but there is nothing in our experience or observation to indicate it as the original cause of being for that which is evolved. Force and matter conjoined could not make a universe, a world, an elephant, a butterfly, a moth, a fruitful germ.

Yet the agnostic, or the pantheist of the type now under consideration, admits the certainty of no other primitive existences than matter and force; for, if God and the universe are identical, God was not when the universe was not; he is the slowly shaping birth of matter and force, and, so long as there are nebulæ still to be condensed and peopled, he is not yet all that he will be. But evolution implies the primitive existence of that which was to be evolved. Nothing can have come out of protoplasm which was not potentially in it. There must have been in rudimentary existence, uncounted ages ago, that from which omniscience could have prophesied the being of your lecturer, of his mind with such

powers as it has, and of the stage of mental development—imperfect as some may think it—in which he has lived and is likely to die a believer in a personal God. This, to me, is not incredible; but, in order to believe it, I must have, behind and beyond the law of development, an efficient creative cause. That cause I can find only in a self-conscious and freely willing Being of infinite resources and unbounded power. Such a Being could lodge in primitive atoms the capacity of becoming all that they have become.

The origin of existence is, indeed, inconceivable; but equally so are the processes of nature with which we are most familiar. The growth of the oak from the acorn, were it a unique phenomenon, would present as difficult a problem as the formation of a world or a system of worlds. I find it as hard to conceive of the one as of the other occurring by any potency that can have been innate in the constituent atoms. Yet the material universe cannot have been uncaused; while the farther back we go in any imagined series of antecedent material causes, we only increase the complexity of the problem, and ascribe an ever-growing mass of causative power to each remoter member of the series, without ever arriving at a member that can have been uncaused.

But, on the hypothesis of a Creator God, there is less strain upon our faith under the evolution theory than under that of specific creation. In the former case we ascribe to him in the vast whole what takes place, as must be admitted, in separate parts of that whole; while in the latter we ascribe to him that of which we have no known precedent or example. The theist of the old school has no doubt that life has been transmitted from the parent stock of each race, that species have been greatly modified by climate, soil, culture, and circumstances, and that in every individual instance the living plant or animal is developed from a germ issuing from antecedent life. The scientific evolutionist simply asserts that the laws or processes which are manifested in all the organic being that now exists preceded, and were represented in, the initial stages of organized life; in fine, that the Creator made the universe in the same way in which he is constantly making it anew,—that the pristine development of nature was in close analogy with what the course of nature always has been and is now. The evolution theory, then, has no pantheistic tendencies which

do not equally belong to the known and indubitable facts and phenomena that are of familiar and constant recurrence.

I have spoken of the universe as if it began to be. The theory that the present order of nature is but the continuance of what always was, of an eternal past, is set aside by modern science. Matter may be eternal in the past; the cosmos is not so. If the cosmos is God, there was a time when, there being no cosmos, there was no God. We know that there was a beginning. The shape of an oblate spheroid could have been given to the earth only by revolution on its axis in a semi-fluid state. Moreover, planetary and—so far as it can be determined—stellar motion is not in a vacuum, but in a resisting and retarding ether, so that the planetary orbits are not circular, but spiral, with diameters decreasing, in an infinitesimal ratio indeed, yet in a ratio which could not have been maintained through a past eternity without the absorption of the planets into the sun from which we have no reason to doubt that they were thrown off. Thus, while on the one hand geology is multiplying by myriads the formerly reputed centuries of the earth's duration, astronomy bears equally clear testimony to the beginning of the worlds that are now, and of the present laws and system of the universe. Nay, geology equally refutes the theory of an unbeginning, eternal series of generations, indicating a birth-time, though in an antiquity whose depths imagination cannot fathom, for organized existence,—a time when on our planet life was not. Thus, science gives us an epoch of which one of the tenable theories is that announced in the first sentence of what many believe to be the oldest book in the world: "In the beginning God created the heavens and the earth."

Let us now consider somewhat in detail the alternative theory to that of an intelligent Creator. There are two alternatives. The universe either was the product of intelligent design, with power adequate to actualize its purpose, or it chanced into being. There is no middle ground; for, as I have said, if the universe is God, God was not when the universe was not. In the pantheistic theory, matter must have been eternal in the past. Its primitive atoms must have been self-existent, of various shapes, according to Epicurus and his followers; of different chemical properties, according to other later authorities; according to still later, homogeneous, but varying both in shape and in bulk. As detached

and separate, they were in, or rather they constituted, a fluid state, and were in incessant motion. For some unexplained reason their motion was not rectilinear, so that mutual impacts, adherences, and entanglements were inevitable. Thus were formed clusters of atoms, some of which blundered into symmetry, thence into organic structure, thence into life, which was the necessary outcome of organism,—a process which had been going on for myriads of ages, and the completion of which in any single portion of matter had not been without myriads of failures,—of such failures as may at this moment be represented in the still uncondensed nebulae. Failures, of course, leave no definite record, so that successful and fruitful impacts and combinations alone remain from the innumerable æons of dice-work that must have elapsed before the swirl of atoms was abated and chaos yielded to law and order.

There are about sixty elementary substances which constitute the organized and inorganic bodies on the face and in the crust of the earth. If, in the last analysis, they are homogeneous, and are—as I have no doubt that they will be found to be—one element, they can hardly represent a less numerous diversity in the shape and bulk of their component atoms; and, however this may be, it is virtually as elements that they enter into the forms in which they constitute, and must from the first have constituted, organized being. Were we to belt the solar system with figures, we could not express the number of possible combinations of two or more of these elements, any of which might have taken place in chaos. But of these combinations the immeasurably larger part would have been of elements mutually incongruous, incompatible, destructive,—a very large proportion, such as could not happen without wide-spread devastation and ruin. With the perpetual imminence of catastrophe we can hardly conceive of the survivance of any of the more congenial and hopeful combinations that had begun to be, still less of such combinations as would constitute a cosmos, an orderly world, so pervaded with mutual dependencies, ministries, and uses as to suggest to minds, if not of the highest type, considerably above the average, a unity of plan and purpose in an intelligent Creator as the only tenable cosmogony. In point of fact, we find no combinations that look as if they had merely happened into being,—none that do not seem to belong to a system; and there are very many systems which, without any mu-

tual causative relations, fit into one another as do the several parts of a skilfully constructed machine, supplying one another's deficiencies and needs, their very discords resolving themselves into staccatos or interludes in the universal harmony. In fine, this world is so made that the theory of design in the Creator is in accordance with spontaneous impression and first thought. One is disabused of it only by philosophical processes that are at the outset uncongenial,—by a great deal of making believe before the belief is really entertained.

Still further, in the solar system there are many identities, proportions, and relations which denote a oneness of plan in the structure and motions of the planets and their satellites. Gravitation is indeed said to account for them; but, as I have shown, gravitation is a law, not a force, and in a chance-made universe there is an intense improbability that bodies would act upon one another at such enormous distances. Gravitation, so far from accounting for these things, is itself to be accounted for. But there are harmonies and analogies in the planetary system which it is not even pretended that gravitation can explain, and which therefore either happened or were designed. Laplace, who was a professed atheist, admitted that, over and above gravitation, there was some inscrutable cause for these phenomena. He subjected them to mathematical calculation, and as to forty-three concurrent motions of planets and satellites he made the probability of their occurrence by chance to be one to four billions four hundred millions. Until some other efficient cause shall be discovered or imagined, I must regard these myriads against one as affording a strong presumption in behalf of an intelligent Creator.

Astronomy has gone still further and extended a like calculus, with similar results, though, of course, only with approximate accuracy, to the stellar universe beyond our system, to the binary stars, to the drift of stars in space, and to the nebulous patches in the heavens.

There is indeed a logical possibility that the entire universe may have been evolved by chance, especially as there is a past eternity for the play of chance. The probability that Milton's "Paradise Lost" might be constructed by drawing letters one by one out of a bag has been calculated, and it would take five hundred thousand figures—four figures representing thousands; seven,

millions, and so on—to express the adverse probability, and yet eternity is long enough for the one chance to occur; but an immeasurably larger draft on eternity would be necessary for the successful, permanent, fruitful relations and analogies of a chance-made universe. The mathematicians in my audience will appreciate my statement when I say that if m represents the number of chances against any single combination, relation, or analogy, m raised to the x power would express the chances against the number x of such combinations, relations, or analogies as enter into a harmonious system; and x in this universe of ours would be a number so far beyond the possibility of estimate that only an infinite mind could form any conception of the x power of m .¹

I do not myself feel the need of mathematical reasoning on a subject which belongs so intimately to the heart and soul; but chance is sometimes talked of in a vague way, as if it were the most natural of suppositions that things happened to be as they are, while in truth chance is a mathematical idea, with its determinate logic and calculus, and what it really means and is actually worth can be made plain only by a mathematical statement.

Let me now speak of some portions and features of the universe which are not accounted for by the evolution theory alone,—which indicate choice, design, and will in a sense other than can be implied in the conception of a God merely co-extensive and identical with nature. This may be affirmed of beauty. Symmetry and adaptation, though not infrequently essential to beauty, do not of themselves create beauty. In the process of evolution every organ and member of every planet or animal must have been generated by need and circumstance, and perfected by use; and, were this all, there could be nothing in the various organisms that was not necessarily allied to the condition, habits, wants, or further development of the species, or was not the vestige of some anterior stage of development. There could have been no surplusage, but only rigid parsimony. We see, however, much that does not serve, and never has served, any functional purpose. Over and above all possible use, present or past, there is a superfluity of beauty,—flowers of the richest dye and most graceful contour, a

¹ The mathematical calculations here given formed, in substance, a part of an article by the writer in the "Princeton Review" for March, 1880, on "The Religious Aspects of the Logic of Chance and Probability."

hundred-fold larger than are needed to shelter the tiny seed ripening at their base, iridescent plumage which gives no added speed or power, in fine, numberless combinations of forms and tints that have no imaginable purpose but to adorn the gala-robcs which are Nature's working-day attire.

The beauty of the universe is the more noteworthy when we consider that it belongs to decay no less than to growth, to autumn no less than to spring, to death no less than to life. The system is one in which decline and dissolution are perpetual; death feeds life, and life, while it lasts, is prolonged only by dying daily. Were the problem presented to a theoretic world-builder of a world in which the tokens and aspects of vigorous and fruitful life shall alternate with periods as long or longer of life waning, extinct, renewed only by infinitesimal increments, he might provide in his scheme for some fair show of bloom, fruitage, and exuberant gladness, but could in thought and vision go no farther. So to embroider the veil thrown over retreating and perishing life as to make it even more gorgeously and gloriously beautiful than that whose vanished splendor it covers, postulates a more than automatic process, more than a God imbedded in nature, unconscious, otiose. It implies in the creative force a conscious love of beauty,—an æsthetic nature which must have rejoiced in the loveliness of its works when the only song of praise was that of the morning stars, and which kindled a kindred æsthetic sense and joy in the living souls of men. I do not mean to except beauty from the evolution theory. I have no doubt that what of beauty there is in beast and bird, tree, shrub, and flower, was potentially in the primitive cells from which they sprang; but that every member of each ascending series should be so fringed and garlanded as to serve no purpose save that of gladdening the eye and heart, be-tokens not mere self-developing nature, but a beauty-breathing, joy-giving spirit presiding over the birth of nature, flowing in the myriad streams in which the fountain of life has parted itself along the ages, and ever revealing itself to recipient minds and souls.

To pass to another topic of similar bearing, on the pantheistic hypothesis life must have been at the outset spontaneous. Matter under certain conditions crystallized—if I may borrow the term—into cells, from which sprang, was propagated, transmitted, de-

veloped, all the life that has been and is in our planet. If this was the case, is it conceivable that matter should no longer be capable, under the most favorable conditions, of bursting into life? Spontaneous life has, indeed, its place in the popular belief. Stagnant water, decaying vegetables, decomposing animal tissues, have been thought to breed insects and worms. But science interposes its negative. Some thirty or forty years ago there was almost a pæan chanted by scientists of the then nascent and anathematized school of evolutionists when the *Acarus Crossii* was announced as a parentless species of animalcules that had been born of pure water; but the experiment, on more minute investigation, proved unsatisfactory, and has, I believe, never been successfully repeated. Thus we have no evidence that there has been in this world life which was not derived from pre-existent life. What life is we know not; but we do know all the constituent elements of animal and vegetable structure, all the methods of their combination, and all their modes of action. If matter and force alone existed in the beginning, they equally exist now, are at our free command, and can be combined in unnumbered ways so as to perform movements and acts analogous to those of living beings. Yet matter has as yet never, within the knowledge of man, begun to live, whether by its own inherent tendencies or by the application of science, art, and skill. If the source of life were in matter, we might not unfitly expect the origination of life within historical epochs. But, as we can trace back to matter everything in organic being, life alone excepted, is it not at least probable that life came from elsewhere? If all the life of which we have any knowledge was derived from pre-existent life, does not analogy point to pre-existent life as the primeval source of all terrestrial life, and thus justify our belief in a self-existent life-giver?

But, even if life in itself be not admitted to indicate primeval and underived life as its source, there are characteristics of human life which contradict the theory of a material origin. Human life, we cannot doubt, has been transmitted through a long succession of human ancestors, and, it may be, through previous æons of a subter-human parentage. Yet, as it now exists, it can be discriminated in certain essential aspects from brute life. We have no reason to suppose that other animals than man have any ideas, conceptions, purposes, sentiments, aspirations which have not their

source, their object, their measure, their limit in the material universe. The most intelligent of them have taken in through the senses all that they know and think, and can have been prompted by experiences derived only through the senses in all that they do. Their enjoyment is commensurate with favorable external conditions,—the only seeming exceptions, those of strong attachment to human beings, being really cases in point; for they are cases in which the animal's self-dependence has been merged in a dependence the withdrawal of which leaves him destitute and incapable of any other resource. But man has a supra-sensual life. He has conceptions to which nothing in the material universe corresponds, sentiments that have no material counterpart or object, desires and aspirations entirely independent of the outward world, the capacity of a happiness so utterly non-contingent on external conditions that it can be maintained in its fulness under circumstances that in themselves can be productive only of suffering and misery. Human ethics are super-sensual. Developed man has a system of morality to which hedonism does not hold the key. He recognizes virtues which can give no pleasure except in the consciousness of their exercise,—moral evil which inflicts no other misery than the sense of its evilness. The intrinsic and eternal Right comprehends fitnesses and excludes unfitnesses which can by no possibility have become known through any material sources or by any material experiences. This supra-sensual life must have had its origin, its beginning, and can have been derived only from a kindred parent-life,—not from a God co-extensive and identical with material nature, but from God who is a spirit, and of whose moral nature man's is the outcome.

Finally, the religious consciousness of men under all forms of culture and of worship bears testimony to the existence of him whom, in distinction from the pantheistic conception, we term a personal God. In the most literal sense, we cannot, indeed, be conscious of the being of God, or of any being but our own. But we can be conscious of a Divine sonship, as we are of traits inherited from human parents or ancestors,—of a tendency to worship without which no mere training could make us worshippers,—of a capacity for love which human loves can never satisfy,—of an appetency for good which the thought of One supremely good underlies. All that is most noble in us, while consciously subjective, blends

spontaneously with and in the conception of objective truth, beauty, and goodness; and the traits of that truth, beauty, and goodness, so far as they are objective in our thought and feeling, are unified. The more intense these conceptions are, first subjectively, then and thence objectively, the less are they scattered, the less is their polytheistic tendency, the more distinct and unvarying is their polarization in One supremely True, Beautiful, and Good.

Nor yet can we shut out the testimony borne in all ages by the souls that have prayed in faith and sincerity. That in the inner man they have experienced what seemed an answer to their prayers none can doubt; for it is the very persons that have asked of God strength for duty, support in trial, peace under adverse conditions, who have wrought the most valiantly, endured the most bravely, lived the most truly above the care-cumbered and sorrow-stricken world. Somehow, men have been lifted by prayer into a higher region of experience. Either they have lifted themselves without a purchase, or they have got a purchase on the throne of the Eternal God. The former alternative is opposed to all known laws of spiritual dynamics; the latter cannot be if there is no God other than Nature.

IS PANTHEISM THE LEGITIMATE OUTCOME OF MODERN SCIENCE?¹

BY EDMUND MONTGOMERY.

The question here proposed is a timely one. It ought to receive a prompt and decisive answer. After so much accurate research into the constitution of things, modern science ought to be able to tell us whether it rightly leads to the conclusion that all natural occurrences are manifestations of one and the same eternal power. If this is its legitimate outcome, then, we may safely rejoice that the long conflict between science and religion has at last ended in peaceful union; that modern Science and modern Chris-

¹ Read before the Concord School of Philosophy, July 31, 1885.